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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/559,820	04/28/2000	Takashi Murai	Q59071	3230

7590 01/11/2005  
Sughrue Mion Zinn Macpeak & Seas PLLC  
2100 Pennsylvania Avenue N W  
Washington, DC 20037-3202

EXAMINER

MCANULTY, TIMOTHY P

ART UNIT PAPER NUMBER

3682

DATE MAILED: 01/11/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

09/559,820

Applicant(s)

MURAI, TAKASHI

Examiner

Timothy P McNulty

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 12 October 2004.  
2a) ☒ This action is FINAL. 2b) ☐ This action is non-final.  
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1,2,4,5,7-9 and 14-20 is/are pending in the application.  
4a) Of the above claim(s) 14 is/are withdrawn from consideration.  
5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.  
6) ☒ Claim(s) 1,2,4,5,7-9, and 15-20 is/are rejected.  
7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.  
8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.  
10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)  
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)  
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.  
4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_.  
5) ☐ Notice of Informal Patent Application (PTO-152)  
6) ☐ Other: \_\_\_\_\_.

## **DETAILED ACTION**

### ***Claim Rejections - 35 USC § 102***

1. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

2. Claims 5 and 9 are rejected under 35 U.S.C. 102(b) as being anticipated by Baden.

Baden discloses in figures 1,2, and 5, a retainer for rolling bearings comprising a rolling element receiving pocket having a pair of ring shaped side plates, a pair of pillars, a first pocket surface formed in said pair of pillars and being arc shaped, a second pocket surface formed on said pair of ring shaped side plates, an escaping recess 15 located between said first pocket surface and said second pocket surface, and a roller run-out preventing portion formed on said pair of pillars and being arc shaped.

The limitation that the pocket surfaces are formed by machining with a tool member or multiply tool members whose machining part has a sectional contour which coincides with a sectional configuration of said pocket surfaces after formation of said pocket does not further limit the retainer as claimed. Even though product-by-process claims are limited and defined by the process, determination of patentability is based on the product itself. The patentability of a product does not depend on its method of production. See MPEP §2113.

### ***Claim Rejections - 35 USC § 103***

3. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

4. Claims 1,2,4,7,8,16, and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Baden.

Baden discloses the basic apparatus as set forth above and further discloses in lines 68-74 of the right column page 2, that the inner surface of said pocket can have straight portions but does not specifically disclose a chamfer at a boundary of said pillar and either an inside or outside diameter of said retainer. However, it would have been obvious to one of ordinary skill in the art at the time the invention to modify the apparatus of Baden in view of the fact that it is old and well known in the art to provide chamfers at boundary edges to reduce stress concentrations. Official Notice is taken to establish that a chamfer is such a well known element in the art.

The limitation that the pocket surfaces are formed by machining with a tool member or multiply tool members whose machining part has a sectional contour which coincides with a sectional configuration of said pocket surfaces after formation of said pocket does not further limit the retainer as claimed. Even though product-by-process claims are limited and defined by the process, determination of patentability is based on the product itself. The patentability of a product does not depend on its method of production. See MPEP §2113.

5. Claims 15 and 17-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Baden.

Baden discloses in figures 1,2, and 5, a retainer for rolling bearings comprising a rolling element receiving pocket having a pair of ring shaped side plates, a pair of pillars, a first pocket surface formed in said pair of pillars and being arc shaped, a second pocket surface formed on said pair of ring shaped side plates, and an escaping recess 15 located between said first pocket surface and said second pocket surface. Baden further discloses a roller run-out preventing portion formed on said pair of pillars and being arc shaped wherein a length of said roller run-out

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portion being less than or equal to a length of a roller inserted in said rolling element receiving pocket but does not specifically disclose said roller run-out portion being greater than 0.75 times the length of said roller. However, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide said roller run-out portion to be greater than 0.75 times the length of said roller, since it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art. *In re Aller*, 105 USPQ 233 (CCPA 1955).

### ***Response to Arguments***

6. Applicant's arguments have been fully considered but they are not persuasive. Regarding the rejection of claims 5 and 9, Baden further discloses that the pocket surfaces can be provided with a curved surface of different radii of curvature. Furthermore, providing a protruding curve on the edge of the run out preventing portion is commonly known in the art as a fillet. Fillets are old and well known in the art and are provided to reduce stress concentrations. Additionally, the edge of the run out preventing portion is inherently a rounded edge as no edge is perfectly sharp or delaminated by a perfect edge, i.e., all edges are inherently rounded, have a radius of curvature. Finally, fillets are provided to smoothly connect to the respective mating surfaces; smoothly is a relative term and as such, all fillets meet such a limitation.

Regarding claims 1,2,4,7,8,16, and 20, providing a chamfer at an edge portion of an element is equally old and well known in the art to reduce stress concentrations.

*Conclusion*

7. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

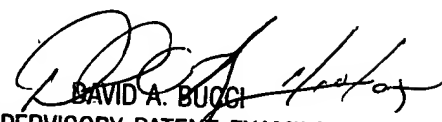
8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Timothy P McAnulty whose telephone number is 703.308.8684. The examiner can normally be reached on Monday-Friday (7:30-5:00).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Bucci can be reached on 703.308.3668. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
tpm

  
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